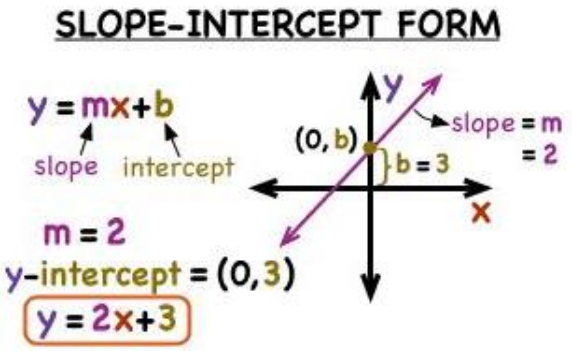
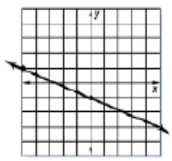
Writing Linear Equations in Slope Intercept Form



To write a linearequation in slope intercept form, you just need a slope and a y intercept. Remember, slope is $\frac{change\ in\ y}{change\ in\ x}$ and y intercept is the starting value or what y is when x=0

$$y = mx + b$$

slope y-intercept

The slope and y-intercept Slope = $\frac{1}{3}$; y-intercept -5	Since the equation is in slope intercept form, you just plug in the slope and y intercept for m and b. $y = \frac{1}{3}x - 5$
A Graph 	**You need to find the slope and the y intercept. The y intercept is where the line crosses the y axis. This line crosses at -1. The slope is found by counting rise over run. The rise is 1 and the run is 2. Since the line goes up and to the left, it is negative.** **y = -1/2 x -1**
A Point and Slope (- 1, 3) and Slope -3	Start with the equation y = mx+b. Plug in the slope for m and the point given for x and y. 3= -3(-1)+b. Solve for b. Then plug in the m and the b and you have your equation. y = -3x+0 or y = -3x
Two Points (-4,-7) and (8,-13)	This is similar to the one above. Before you do the steps listed above, you have to find the slope between the two points. I recommend putting them into a table. After you find the slope, plug in the slope and one of the points (either one) and solve for b. Write your final equation with m and b.